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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/189,914	07/25/2011	Karl Georg Hampel	810176-US-NP	1158

76614 7590 12/02/2016

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ART UNIT	PAPER NUMBER
2455	

NOTIFICATION DATE	DELIVERY MODE
12/02/2016	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KARL GEORG HAMPEL

Appeal 2015-006266
Application 13/189,914[1]
Technology Center 2400

Before JAMES R. HUGHES, MONICA S. ULLAGADDI, and JOHN D. HAMANN, *Administrative Patent Judges*.

HAMANN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant files this appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–21. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

THE CLAIMED INVENTION

Appellant's claimed invention relates to communication systems having reliable session migration without requiring additional option headers to each packet or inducing transmission delay, including by utilizing

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[1] According to Appellant, the real party in interest is Alcatel-Lucent USA Inc. App. Br. 3.

aggregated checksums. Abstract. Claim 1 is illustrative of the subject matter of the appeal and is reproduced below.

> 1. A method for migrating from a first path to a second path in a stream-oriented communication session in a multipath communication system, the method comprising:
>
> at a processor communicatively coupled to a digital data storage, setting the communication session to operate in a selected path mode over the first path;
>
> transmitting or receiving, by the processor in cooperation with the digital data storage, a plurality of packets over the first path;
>
> aggregating, by the processor in cooperation with the digital data storage, a first checksum based on the plurality of packets;
>
> wherein aggregating occurs at least in part while transmitting or receiving;
>
> performing, by the processor in cooperation with the digital data storage, a checksum match, the checksum match based on the first checksum; and
>
> migrating, by the processor in cooperation with the digital data storage, the communication session from the first to the second path based on the checksum match.

REJECTION ON APPEAL

The Examiner rejected claims 1–21 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Srihari et al. (US 2010/0036861 A1; published Feb. 11, 2010) (hereinafter "Srihari") and Wu et al. (US 2012/0226802 A1; published Sept. 6, 2012) (hereinafter "Wu").

DISPOSITIVE ISSUE ON APPEAL

The dispositive issue for this appeal is whether the Examiner errs in finding the cited portions of Wu teach or suggest "migrating . . . from the

first path to the second path," as recited in claims 1 and 15, and similarly recited in claim 8.

ANALYSIS

We find Appellant's arguments persuasive with respect to the cited portions of Wu failing to teach or suggest the above dispositive, disputed limitation.

Appellant argues the combination, and Wu in particular, fails to teach or suggest the above disputed limitation. App. Br. 9–10; Reply Br. 7–8. Appellant first argues the Examiner's construction for "path" as including "software paths" is incorrect. App. Br. 10. Rather, Appellant contends "one skilled in the art would understand the term path in the context of transmitting and receiving packets in a multipath communication system to be the physical route in the communication system." *Id*. Appellant cites dictionary definitions supporting Appellant's construction for path. *See* Newton's Telecom Dictionary (26th ed.)[2] (stating "a path is defined as, '[t]he physical route a telecommunications signal follows from transmitter to receiver'"); Webster's New World Telecom Dictionary (stating "a path is defined as, '[i]n communications, the route between any two nodes"); *see also* Wikipedia (visited on May 2, 2014) (stating "definition of multipath routing is . . . 'the routing technique of using multiple alternative paths through a network, which can yield a variety of benefits such as fault tolerance, increased bandwidth, or improved security'").

[2] We understand that the twenty-sixth edition was publicly released in August, 2011. *See http://fozblog.org/archives/42754* (last visited Nov. 21, 2016).

Appellant also argues the Specification and the claim language supports construing "path" to be the physical route in the communication system. *See* App. Br. 9. As to the Specification, Appellant argues Figure 1 illustrates two separate physical paths (120-1 and 120-2) between two end nodes (110-1 and 110-2). *See id.* (citing Fig. 1). Appellant also cites to the following passage from the Specification in support:

> "**Various access networks** may be available to end node 110-1 to participate in a communication session with end node 110-2 to communicate session packet data. **An example of two such paths is provided by paths 120-1 and 120-2**. . . . Paths 120-1 and 120-2 **include access networks 150 and 160** that may directly route session packets to end node 110-1 or subsequently route packets through the internet cloud 170 to end node 110-2".

Id. (citing Spec. 4, ll. 11–20).

As to the claim language, Appellant cites claim 1 to argue the first and second paths refer to the multipath communication system of the preamble, and evidence a requirement of having two separate, physical paths. *See id.*; *see* also Reply 7–8 (arguing the preamble should be given patentable weight (i) because it is essential to the point of the invention defined by the claims and (ii) preamble terms are included in the body of the claims).

Turning to the combination's teachings, and Wu in particular, Appellant argues Wu fails to teach or suggest the disputed limitation because Wu fails to teach or suggest two physical paths. *See id.* Appellant argues Wu instead teaches two operational modes (i.e., mode A and mode B), which the Examiner describes as "software paths," but which are not two separate physical paths as required by the claims. *See* App. Br. 9–10 (citing Final Act. 4 (citing Wu ¶¶ 133, 136)).

The Examiner finds "[t]he limitation 'path' to one of ordinary skill in the art and in light of the specification may be implemented in hardware, software or a combination of hardware and software." Ans. 3. In support of this construction, the Examiner also cites published patent applications for how they use the term "path." *See* Ans. 13–15 (finding references disclose a software path through the storage operating system layers, a virtual or software path to migrate from a LAN to a WAN connection, and selecting a different I/O software path to resend a request to a storage array). The Examiner also finds "multipath communication system" is recited in the preamble and should not be afforded patentable weight because it merely recites the purpose or intended use of the claims. *See* Ans. 8–9.

As to Wu, the Examiner finds "[o]ne of ordinary skill in the art would understand that Wu teachings of modes A and B to be 'first path to a second path.'" Ans. 4 (citing Wu ¶ 122 (finding "various events could cause the receiver device to switch between mode A and mod[e] B")). For mode A, the Examiner finds the sender transmits a checksum-match to notify the receiver that the transparent middlebox assumption is true, and the sender therefore does not have to use a receiver checksum to validate that feedback is from the receiver. *See* Ans. 9 (citing Wu ¶ 133). For mode B, the Examiner finds the sender determines whether the received message contains a predefined receiver option (either an MPTCP-specific option or a Receiver Originated Flag), and if so, the sender uses the subflow-level acknowledgment from the receiver. *See* Ans. 9–10 (citing Wu ¶ 136).

We are persuaded by Appellant's arguments. We agree with Appellant that the Examiner's construction for "path" is incorrect. Although "the PTO must give claims their broadest reasonable construction consistent

with the specification[,] . . . claims should always be read in light of the specification and teachings in the underlying patent." *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1259–60 (Fed. Cir. 2010) (citation omitted); *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1298 (Fed. Cir. 2015). We find one of ordinary skill in the art, in light of the Specification and claim language, would have understood path to mean a physical route in a communication system. The Specification clearly uses the term "path" in the context of a separate physical route. *See* Spec. Fig. 1; 4, ll. 11–20. The claim language also uses the term path in the context of a multipath communication system (which has multiple physical paths), and we agree with Appellant that the preamble should be given patentable weight, including because it is relied upon by the first and second path limitations in the body of the claim for antecedent basis. We also note that it also further informs one of ordinary skill in the art of the meaning of path ascribed by Appellant. Furthermore, we find the dictionary definitions for path cited by Appellant (i.e., defining paths as physical routes) consistent with the Specification, while finding the published patent applications cited by the Examiner (i.e., defining paths as including software and virtual paths) are not consistent with the Specification. *See* Spec. Fig. 1; 4, ll. 11–20; *see also Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 n.6 (Fed. Cir. 1996) ("[We] may [] rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents.").

Lastly, in light of our construction for path, we agree with Appellant that the cited portions of Wu fail to teach or suggest "migrating . . . from the

first path to the second path" because they fail to teach or suggest physical paths. *See* Wu ¶¶ 133, 136.

Accordingly, we do not sustain the Examiner's § 103(a) rejection of claims 1, 8, and 15, as well as claims 2–7, 9–14, and 16–21, which depend from one of these claims.

DECISION

We reverse the Examiner's decision rejecting claims 1–21.

REVERSED